SECTION 4. INTENSITY REGULATIONS

4.1 General Requirements

The erection, extension, alteration, or moving of a structure, and the creation or change in size or shape of a lot shall be permitted only in compliance with the intensity and dimensional requirements set forth herein, except as provided at Section 1.5, Non-Conforming Uses and Structures, and in Section 6, Chapter 40A, Massachusetts General Law, and except for lot line changes which create neither additional lots nor increase in nonconformity.

4.2 Schedule of Dimensional Regulations

4.2.1 Area Requirements

	MINIMUM LOT AREA	MINIMUM LOT FRONTAGE	MAXIMUM FLOOR AREA RATIO	MAXIMUM LOT COVERAGE	MINIMUM OPEN SPACE
DISTRICTS	SQ. FT.	FEET		% OF LOT	% OF LOT
SR-A	25,000	125	1	20%	50%
SR-B	12,000	90	-	25%	50%
SR-C	9,000	75		25%	50%
SR-D	25,000	125		20%	50%
GR	7,000 ²	70		30%	40%
AH	85,000 ²	100		30%	40%
LBI		20	1.25 ¹		
LB II		20	1.05	35%	
LB III		20	1.05	35%	
GB		20			
PL					

¹⁾ In an LBI District, a floor area ratio up to a maximum of 1.5 may be allowed by Special Permit from the Board of Appeals (see §4.4).

²⁾ But not less than 1,000 square feet per dwelling unit for multi-family dwellings in a GR District, 1,200 square feet per dwelling unit in an AH District.

4.2 Schedule of Dimensional Regulations

4.2.2 Linear Requirements

	MINIMUM SETBACK DIMENSIONS FEET ⁸			MAXIMUM BUILDING HEIGHT ¹	
DISTRICTS	Front	Side	Rear	Feet	Stories
SR-A and SR-D ➤ Dwelling ➤ Other	30 ² 30 ²	15 15 ⁶	40 ^{3,4} 25 ⁶	36 ⁵ 36 ⁵	2½ ⁵ 2½ ⁵
SR-B and SR-C ➤ Dwelling ➤ Other	25 ² 25 ²	10 10 ⁶	30 ^{3,4} 25 ⁶	36 ⁵ 36 ⁵	2½ ⁵ 2½ ⁵
GR ➤ Dwelling ➤ Other	20 ² 20 ²	10 ⁷	20 ³ 12 ⁶	33 33 ⁵	2½ 2½ ⁵
АН	30	30	30	60	
LBI	5	6 or none ⁹	6 or none ⁹	28	2 ^{10,11}
LB II	10	09	20 ⁹	32	2 ¹⁰
LB III	10	0 ^{9,12}	20 ⁹	28	2 ¹⁰
GB	5	6 or none ⁹	6 or none ⁹	36	
PL					

Note: §4.2.2 was amended by Article 24 at the 2003 Annual Town Meeting. §4.2.2 was further amended by Article 10 at the 2004 Special Town Meeting. §4.2.2 was further amended by Article 18 at the 2005 Annual Town Meeting.

4.2.2 Schedule Footnotes:

- Chimneys, towers and other projections not used for human occupation may exceed the height limitations herein provided that, except for single vertical freestanding tubular antennae; any such projection above the building exceeding 10 feet or 20% of the building height, whichever is greater, shall be allowed by Special Permit only.
- 2) No building need be set back more than 30% of the depth of the lot in a Single Residence A or D District, 25% of the lot depth in a Single Residence B or C District,

nor 20% of the lot depth in a General Residence District, nor more than the average of the setbacks of the buildings on the lots contiguous thereto on either side, a vacant lot, a lot occupied by a building set back more than the required minimum, or an intersecting street being counted as though occupied by a building set back at that minimum. However, in no case shall the setback be less than 10 feet in the General Residence District or 15 feet in Single Residence Districts.

3) On lots having depth of less than 100 feet, dwelling setback from the rear lot line shall equal not less than 40% of lot depth in the Single Residence A and D Districts, not less than 30% of lot depth in Single Residence B and C Districts, and not less than 20% of lot depth in General Residence Districts; but in no event shall the rear setback equal less than 25 feet in Single Residence Districts or less than 16 feet in General Residence Districts.

Note: §4.2.2 3) was amended by Article 30 at the 1994 Annual Town Meeting.

- 4) The Board of Appeals may grant a Special Permit reducing the rear setback requirement of corner lots and other unusually configured lots to not less than the side requirement, taking into consideration the configuration of the lot, and the effect upon the neighboring property.
- 5) Greater height is permitted provided the building setback from each street and lot line exceeds otherwise applicable requirements by 10 feet plus one foot for each foot of excess height, but in no case shall building height exceed 60 feet or 4 stories in height.
- 6) For accessory buildings, see Section 4.3.5. On lots having depth of less than 100 feet, principal building setback from the rear lot line shall equal not less than 25% of lot depth in Single Residence Districts or 15% of lot depth in General Residence Districts.
- 7) Side line setback may be reduced to zero for a dwelling sharing a party wall with another dwelling on the abutting lot, provided the opposite side line setback shall be at least 16 feet from the opposite lot side line.
- 8) Ornamental features, such as belt courses, chimneys, eaves, gutters, sills, pilasters, or lintels, may project up to two feet into the setback.

Note: §4.2.2 8) was amended by Article 28 of the 2006 Annual Town Meeting.

9) Adjacent to Residential District, no less than building height or 20 feet, whichever is greater.

Note: §4.2.2 9) was amended by Article 24 at the 2003 Annual Town Meeting. §4.2.2 9) was further amended by Article 10 at the 2004 Special Town Meeting.

- 10) No more than two stories wholly or partially above grade.
- 11) In LBI Districts, a maximum building height of up to 32 feet and 3 stories may be allowed by Special Permit from the Board of Appeals, as provided in Section 4.4.
- 12) For structures originally built as residences and not adjacent to Residential District, the lesser of the side setback existing as of May 5, 2003, or 10 feet.

Note: §4.2.2 12) was amended by Article 10 at the 2004 Special Town Meeting.

4.3 Specific Requirements

4.3.1 Lot Width

Any lot to be used for a dwelling shall, between the street and the rear line of the dwelling, maintain a lot width measured between side lot lines no smaller than the required street frontage for the district in which the lot is located.

4.3.2 Unenclosed Porches

In Single Residence and General Residence Districts, unenclosed porches, except on multi-family dwellings, may be built five feet nearer the street line than the required setback.

4.3.3 Unenclosed Steps and Similar Projections

Subject to Section 4.3.8, the provisions of Section 4.2 shall not apply to unenclosed steps, unroofed porches, ramps for the handicapped or other similar features which are not more than three feet high above the adjacent grade and which do not project more than four feet from the foundation wall and in no event are closer than four feet to a lot sideline and ten feet to a lot rearline.

4.3.4 Exception for Recorded Lots

As provided in Section 6 of Chapter 40A, Massachusetts General Law, any increase in the area, frontage, width, or setback requirements of this By-Law shall not apply to a lot to be used for single- and two-family dwellings if at the time of its recording the lot was:

- 1) Not held in common ownership with any adjoining land,
- 2) Conformed to then existing requirements, and
- 3) Had less than the proposed requirement but at least 5,000 square feet of area and 50 feet of frontage.

Applicants seeking this exemption shall document to the Building Inspector the lot's eligibility for it, through copies of recorded deeds for that and adjoining properties as of the date of adoption of the requirements not being complied with.

In addition, in the General Residence District, the separate use of contiguous nonconforming lots for erection of single-family or two-family dwellings is permitted provided that each such lot was:

- Conforming at the time any instrument on which it was shown was first recorded in the Registry of Deeds,
- 2) Contains at least 5,000 square feet of lot area and has 50 feet of frontage, and
- 3) Is consistent in size and shape with the prevailing pattern in the vicinity.

4.3.5 Accessory Buildings

Note: §4.3.5 was amended by Article 28 of the 2006 Annual Town Meeting.

a) General Requirements

 Except as provided in subsection c.2 below, a private one-story garage for not more than three automobiles, a noncommercial greenhouse, or a tool shed used for the storage of tools, yard and household equipment, or other similar accessory buildings, shall be set back at least five feet from the side line and rear line of the lot and five feet from the principal building to which it is accessory.

Note: §4.3.5 a) 1) was amended by Article 22 at the 2008 Annual Town Meeting.

- 2. An accessory building shall be on the same lot as the principal building to which it is accessory.
- 3. A garage shall have a vehicular access from the street.

b) Dimensional Regulations

- 1. Accessory Buildings shall not exceed the following:
 - > 150 square feet of floor area (660 square feet for a garage) or
 - a height of 10 feet (15 feet for a garage).
- 2. Accessory Buildings shall be set back at least five feet from the side line and rear line of the lot and five feet from the principal building to which it is accessory.

c) Rear Yard Restrictions

- 1. A building accessory to a dwelling shall cover not more than 40% of the rear yard of the lot. The rear yard for this provision is defined as the area between a line obtained by extending the rear line of the dwelling to each of the sidelines of the lot and the rear line of the lot.
- 2. If any part of the accessory building is forward of the rear line of the dwelling, the accessory building shall conform to the front setback, side line and rear line requirements for a dwelling in the district in which the accessory building is located.
- 3. Additions to existing dwellings may extend beyond the front line of existing unattached accessory buildings provided said additions meet the requirements for setback, sideline, rearline setbacks and lot coverage and open space requirements for the respective zoning district.

Note: §4.3.5 c) 3 was amended by Article 23 at the 1998 Annual Town Meeting. §4.3.5 c) 3 was further amended by Article 6 at the 2007 Special Town Meeting.

d) Satellite Antennae

- 1. Satellite antenna with a receiving dish with a visually coherent surface of 8.5 square feet or less or a diameter of one meter or less may be built:
 - i. no closer than 5 feet from any lot line or
 - on the structure to which it is accessory provided it is at least 5 feet from any lot line and,
 - iii. if pole mounted, is not more than 10 feet above the adjacent grade.

Note: §4.3.5 d) 1 was amended by Article 28 at the 1996 Annual Town Meeting. §4.3.5 d) 1 was further amended by Article 19 at the 1999 Annual Town Meeting.

- 2. Satellite antenna with a receiving dish with a visually coherent surface of more than 8.5 square feet or over one meter in diameter may be built:
 - i. no closer than 5 feet from the rear and side lines of a lot and
 - ii. not within the required front setback of the lot.
 - Any satellite dish located in a commercial or industrial zone any satellite dish located adjacent to Residential Districts shall be no closer than the required setbacks in that district.

Note: §4.3.5 d) 2 was amended by Article 27 at the 1996 Annual Town Meeting. §4.3.5 d) 2 was further amended by Article 19 at the 1999 Annual Town Meeting.

4.3.6 Tennis Courts and Similar Recreational Facilities

The regulations which apply to an accessory building in Section 4.3.5 shall also apply to a tennis court and other similar recreational facility as an accessory use. Where a tennis court or other facility is the principal use on a lot or is located in the front yard, the regulations of Section 4.2 shall apply.

4.3.7 Corner Setback for Fences and Other Landscaping

Note: §4.3.7 was amended by Article 31 at the 2006 Annual Town Meeting.

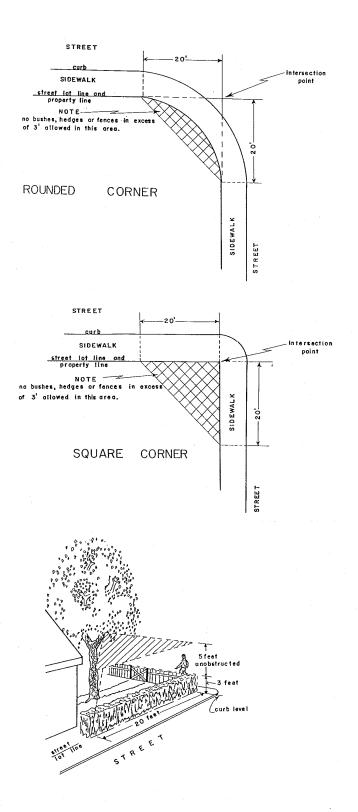
- a) Corner lots and intersecting streets
 - No building or structure in any district may be erected and no fence and no vegetation, except tree trunks, may be maintained or allowed to remain between a height of three feet and eight feet above the plane through their center line grades between the property lines of intersecting streets and a line joining points on such lines 20 feet distant from their point of intersection or, in the case of a rounded corner, the point of intersection of their tangents.
 - 2. However, in a Local Business I, Local Business II, Local Business III or General Business District no part of a building shall be built closer to the point of intersection of right-of-way lines than 10 feet.

b) Driveways and Sidewalks or other pavement

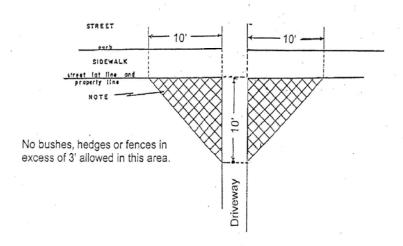
No fence and no vegetation, except tree trunks, shall be located within a site triangle so as to obstruct visibility between a height of three feet and a height of eight feet above the plane through their curb grades. The site triangle is that area of the intersection of street rights-of-way or pavement with other streets, driveways or walkways, formed by the side lines of street rights-of-way or pavement, driveways or walkways and a line joining points on such lines ten feet distant from their point of intersection.

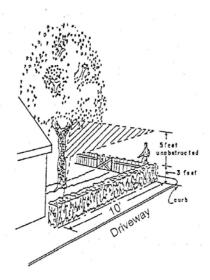
(Diagrams for 4.3.7, Corner Setback for Fences and Other Landscaping, on the next page)

(Diagram for a) Corner lots and intersecting streets)



(Diagram for b) Driveways and Sidewalks or other pavement)





4.3.8 Solar Energy Systems

Note: §4.3.8 was amended by Article 9 at the 2012 Special Town Meeting.

a) Purpose

The purpose of this Solar Energy System By-Law is to encourage investment in Solar Energy Systems in the Town of Belmont, while providing guidelines for the installation of those systems that are consistent with the character of the Town and are necessary to protect the public health, safety and general welfare.

b) Definitions

Accessory Solar Energy System - A Solar Energy System that supplies electrical or thermal power primarily for on-site use.

Building-Integrated Solar Energy System - A Solar Energy System that is an integral part of a principal or accessory building replacing or substituting for an architectural or structural component of the building. Building-Integrated Solar Energy Systems include but are not limited to Photovoltaic or hot water solar systems that are contained within roofing materials, windows, or skylights.

Photovoltaic (PV) - The technology that uses a semi-conductor material to convert light directly into electricity.

Solar Collector Panel - Any part of a Solar Energy System that absorbs solar energy for use in the system's energy transformation process. The Solar Collector Panel does not include frames, supports or mounting hardware.

Solar Energy System – A device or structural design feature, a substantial purpose of which is to provide for the collection, storage, and distribution of solar energy for space heating or cooling, electrical generation, or water heating.

c) General Standards

- A Solar Energy System shall provide power for the principal use and/or accessory use of the property on which the Solar Energy System is located and shall not be used for the generation of power for the sale of energy to other users, although this provision shall not prohibit the sale of excess power generated to the local utility company.
- Whenever practical, all Accessory Solar Energy Systems shall be attached to a building.
- 3. A Solar Energy System shall not be used to display advertising, including signage, streamers, pennants, spinners, reflectors, ribbons, tinsel, balloons, flags, banners, or similar materials.
- 4. The manufacturer and equipment information, warning, or indication of ownership shall be allowed on any equipment of the Solar Energy System.

- 5. The owner of the Solar Energy System shall remove it if the Inspector of Buildings determines that it has become a hazard.
- Solar Collector Panels shall be placed and arranged such that reflected solar radiation or glare shall not be directed onto adjacent buildings, properties or roadways.
- 7. Roof-mounted Solar Energy Systems shall be set back a minimum of 1 foot from all roof edges (eaves, gutterline, ridge) of the roof surface.
- 8. Appurtenant electric, piping, wiring or equipment for Solar Energy Systems shall be allowed to extend beyond the perimeter of the building on a side or rear yard exposure, but must be affixed to the building or structure in a neat and workman like manner with the intent of connection to the building system or to run underground.
- The horizontal area covered by the area of the Solar Collector Panels of a ground-mounted system at optimum design tilt shall be calculated as part of the overall lot coverage.
- 10. All power transmission lines and/or piping from a ground-mounted Solar Energy System to any building or other structure shall be located underground unless otherwise required by the State Building Code.
- 11. A ground-mounted Solar Energy System shall limit the impacts on the surrounding properties, maintain safe accessibility, and limit storm water runoff.
- 12. Solar Energy Systems as an accessory use shall be allowed, subject to the provisions of this Section 4.3.8, within the McLean District, the Belmont Uplands District, the Oakley Neighborhood Smart Growth Overlay District, and the Cushing Square Overlay District.
- d) Design Standards in Residential Districts
 - 1. Roof-mounted Solar Energy Systems
 - i. Roof-mounted Solar Energy Systems are permitted on principal and accessory structures.
 - ii. All roof-mounted Solar Collector Panels will be subject to the following height limitations:
 - The top surface of any Solar Collector Panel mounted on a south-facing sloped roof shall not exceed 12 inches above the adjacent finish roof surface.
 - b. The top surface of any Solar Collector Panel mounted on a north-, east-, or west-facing sloped roof shall not exceed 24 inches above the adjacent finish roof surface.

c. The top most point of any Solar Collector Panel mounted on a flat roof (1/2 inch or less per foot slope) shall not exceed 30 inches above the adjacent finish roof surface on flat roofs with or without parapets.

The Planning Board may grant a Special Permit to exceed such height limitations subject to the provisions of Section 7.4

2. Ground-mounted Solar Energy Systems

- i. The minimum setback distance from the side and rear property lines to a ground-mounted Solar Energy System shall be five feet when oriented at minimum design tilt. A ground-mounted Solar Energy System shall not be located within the front yard, defined as the area between the front façade of the principal building extended to the side property lines and extending to the street line (corner lots have two (2) front facades).
- ii. A ground- or pole-mounted Solar Energy System shall not exceed 8 feet in height to the tallest point of the Solar Collector Panels at 42.39°. Greater height is permitted provided the Solar Energy System setback from each lot line exceeds otherwise applicable setback requirements by 10 feet plus one foot for each foot of excess height. In no case shall the height exceed ten feet. The Planning Board may grant a Special Permit to exceed this height limitation subject to the provisions of Section 7.4.

e) Design Standards in Non-Residential Districts

- 1. Building-mounted Solar Energy Systems are permitted in the following locations:
 - On the roofs of principal and accessory structures, and/or
 - On side and rear building facades, or on front or corner building facades, so long as the Solar Energy System is a Building-Integrated Solar Energy System.
- All Solar Energy System appurtenances such as, but not limited to, plumbing, water tanks, mounting structures, and support equipment shall be screened to the maximum extent possible without compromising the effectiveness of the Solar Collector Panels.

3. Roof-mounted Solar Energy Systems

- i. A roof-mounted Solar Energy System on a flat roof (1/2 inch or less per foot slope), whether mounted on the principal building or accessory building, shall be considered to be a mechanical device and shall be restricted consistent with other building-mounted mechanical systems.
- ii. All roof-mounted Solar Collector Panels on a sloped roof will be subject to the following height limitations:

- The top surface of any Solar Collector Panel mounted on a south-facing sloped roof shall not exceed 12 inches above the adjacent finish roof surface.
- b. The top surface of any Solar Collector Panel mounted on a north -, east-, or west-facing sloped roof shall not exceed 24 inches above the adjacent finish roof surface.

The Planning Board may grant a Special Permit to exceed such height limitations subject to the provisions of Section 7.4.

4. Ground-mounted Solar Energy Systems

- i. The minimum setback distance from the side and rear property lines to a ground mounted Solar Energy System shall be five feet when oriented at minimum design tilt. A ground-mounted Solar Energy System shall not be located within the front yard, defined as the area between the front façade of the principal building extended to the side property lines and extending to the street line (corner lots have two (2) front facades).
- ii. A ground- or pole-mounted Solar Energy System shall not exceed the maximum height of ten feet. The Planning Board may grant a Special Permit to exceed such height limitation subject to the provisions of section 7.4.

4.3.9 Multiple Buildings

More than one principal building other than a single-family or two-family dwelling may be erected on a lot, subject to the requirements and procedures for Design and Site Plan Review in Section 7.3, provided that lot area and yard requirements are met for each building without counting any lot area or yard twice.

4.3.10 Lot Shape

No lot shall be created so as to be so irregularly shaped or extended that it has a "Shape Factor" in excess of twenty-two (22).

The Shape Factor equals the square of the lot perimeter divided by the lot area (before deduction for wetlands, etc.). That portion of the lot in excess of the required lot area may be excluded from the computation of Shape Factor using an imaginary lot line, provided that the entire required frontage is included in the portion used for the calculation.

4.4 Local Business I Exceptions

In the Local Business I District, the Board of Appeals may authorize certain increased limits to building height and floor area ratio, as provided in Section 4.2. All such applications shall be subject to Design and Site Plan Review by the Planning Board, as provided in Section 7.3. In acting upon applications for such increases, the Board shall consider the following, in addition to the criteria for Special Permits generally (Section 7.4.3):

- a) whether and by how much building height or scale will exceed that of nearby structures,
- b) whether and by how much the building will exceed the height of trees in the vicinity,
- c) whether any potential intrusiveness has been resolved through increased yards, design of building form, or other means,
- d) whether any resulting building prominence is appropriate, in light of the functional or symbolic role of the structure,
- e) whether and by how much shadowing on abutting land or streets will be increased, or privacy will be diminished,
- f) whether there are fire protection concerns created by the increase,
- g) what the traffic consequences are of any increased floor area,
- h) whether the requested increase is necessary for the proposal to proceed, and
- i) what the community benefits are from the proposal, including consideration of taxes, employment, and service.